# **Engineering the Past** for the Future:

A Practical Approach to Engineering for **Older and Historic Buildings** 

JUNE 6-16, 2006 Natchitoches LA

# WWW.NCPTT.NPS.GOV/SUMMERINSTITUTE

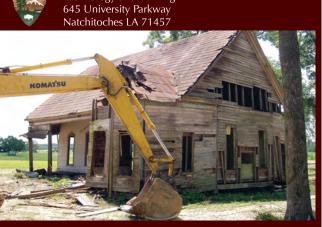


A Training Series for experienced engineering professionals of all technical disciplines as well as architects and other preservation professionals with strong technical backgrounds.



First Class Mai Postage and Fees

National Park Service



National Center for Preservation

Technology and Training

A Practical Approach to Engineering for Older and Historic Buildings

JUNE 6-16, 2006 Natchitoches LA

# MAKE THE LATEST TECHNOLOGY IN ARCHITECTURE AND ENGINEERING WORK FOR YOU



## The Materials and Building Pathology course covers the following:

- Functional requirements and physical properties of historic materials
- Common mechanisms of deterioration
- Intrinsically flawed historic building materials and assemblies
- Concerns when introducing contemporary materials into older buildings
- Functional requirements and vulnerabilities of the systems and components comprising the building envelope and structure
- Potential for interaction that results with combinations of deterioration
- Environmental factors and deterioration
- Matching older building components and assemblies with modern replacements
- Flawed structures which have survived

# Diagnostics Methodology and Treatment Strategies covers the following:

- Research and documentary review
- Impact of prior interventions and environmental conditions on the building
- Limitations of single-point observations and ways to overcome such limitations
- Going beyond symptoms of deterioration to identify mechanisms and enabling factors
- Developing and validating a hypothesis as to the mechanism(s) of deterioration
- Investigating deterioration mechanisms and developing effective treatment strategies
- Documenting the process of selecting treatment strategies
- Impact of conflicting technical and non-technical considerations
- Evaluating potential success of treatment strategies
- Documentation and evaluation of implemented intervention

# Presented in partnership with

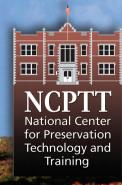






"The methodology of approach used in this course to solve problems with older and historic buildings will help me in my professional career. Having access to the case studies along with the teaching style has made the course one of the best continuing education unit courses I have participated in."

> Scott Falvey; Architect, **Knoxville, TN**



# Engineering the Past for the Future: A EN

A PRACTICAL APPROACH TO ENGINEERING FOR OLDER AND HISTORIC BUILDINGS

**JUNE 6-16, 2006** 

Natchitoches LA

These courses introduce the issues and technical challenges encountered in older and historic buildings, and emphasize the subtle shifts in perspective and problem-solving methods that are necessary when working with these resources. Courses can be taken individually or combined for a full two-week introduction to Preservation Engineering.

# WHAT YOU'RE LOOKING FOR IN ENGINEERING TRAINING

• PART 1: Historic Materials and Building Pathology JUNE 6-10, 2006

\$695

• PART 2: Diagnostics Methodology & Treatment Strategies
JUNE 12-16, 2006

Courses limited to 25 participants. See full course descriptions on reverse side.

Get \$100 off when you enroll in multiple parts of the course:

Discount Rate for Entire Course: \$1290

ATTENTION STUDENTS: Three competitive scholarships are available. Contact Andy Ferrell at (318) 356-7444 or andrew ferrell@nps.qov for further details.





# IN THE PERFECT SETTING: FROM THE LAB TO THE FIELD







Beginning at the modern training facilities and labs of the National Center for Preservation Technology and Training, your learning experience will be enhanced by hands-on exploration of the circa 1800 Yucca and Africa Houses, located at Melrose Plantation in northwest Louisiana. Established by one the wealthiest families of free people in the antebellum South, the plantation grounds contain some of the oldest structures built by persons of African heritage for their own use in the United States.

# FLEXIBLE TRAINING/LASTING BENEFITS

"This course trained us to make better decisions for the treatment and preservation of older and historic buildings."

Doreen Pulley-Kats, Engineer, Twinsburg, OH:

# PROFESSIONAL DEVELOPMENT CREDIT





For more information and to apply, visit our website: www.ncptt.nps.gov/summerinstitute

**Detailed information on** 

Courses • Instructors • Audience • Sites
Fees and Registration • Accommodations
Student Scholarships
Or Call 318-356-7444

"Many times, builders of historic buildings didn't necessarily follow the same rules of construction we use today. The information we learned here is helping me rethink how I look at these buildings and giving me a firm foundation to address these issues in my future career."